Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 (previously presented): A method for modulating the processing of an amyloid precursor protein (APP), said method comprising contacting a composition containing said APP with an aspartyl protease inhibitor having the formula:

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$$R_3$$
 N
 N
 R_2
 R_6
 N
 R_5
 R_5
 R_5

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wherein:

R₁, R₂ and R₃ are members independently selected from the group consisting of 7 alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted 8 9 arylalkyl, aryloxyalkyl, substituted aryloxyalkyl, heteroaryl, substituted 10 heteroaryl, heteroarylalkyl, substituted heteroarylalkyl, heterocycles, 11 substituted heterocycles, heterocyclicalkyl and substituted 12 heterocyclicalkyl; and 13 R₅ and R₆ are independently selected from the group consisting of hydrogen, halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, 14 substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl; or R5 and 15 R₆ and the carbons to which they are bound join to form an optionally 16

member selected from the group consisting of:

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substituted carbocyclic or heterocyclic fused ring system having a total of 17 9- or 10-ring atoms within said fused ring system. 18 2 (original): The method according to claim 1, wherein: 1 2 R₁ is a member selected from the group consisting of substituted alkylaryl, substituted aryl, substituted alkyl and substituted heterocyclic groups. 3 3 (original): The method according to claim 2, wherein: 1 R₁ is a member selected from the group consisting of: 2 3 4 1 4 (original): The method according to claim 1, wherein: 2 R2 is a member selected from the group consisting of substituted alkyl, 3 heterocyclic and substituted heterocyclic groups. 5 (previously presented): The method according to claim 4, wherein R₂ is a 1

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$$CH_{2}-$$

$$CH_{2}-$$

$$CH_{2}-$$

$$H_{3}C-N$$

$$CH_{2}-$$

$$CH_$$

6 (original): The method according to claim 1, wherein:

R₃ is a member selected from the group consisting of substituted alkyl and substituted aryl groups.

7 (original): The method according to claim 6, wherein R₃ is a member selected from the group consisting of:

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$$\begin{array}{c} Cl & HC \\ Cl & Cl \\$$

8 (original): The method according to claim 1, wherein R₅ and R₆ and the carbons to which they are bound form an optionally substituted napthalene ring.

9 (original): The method according to claim 1, wherein R_5 and R_6 are both hydrogen.

10 (original): The method in accordance with claim 1, wherein R_5 is hydrogen and R_6 is meta or para to R_5 and is a member selected from the group consisting of halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl.

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11 (original): The method according to claim 1, wherein said aspartyl protease

2 inhibitor is a member selected from the group consisting of:

	OH N
CI OH N N N N N	OH N
	OH N N N N N N N N N N N N N N N N N N N
CH ₃ OH OH N OH N OH N OH	H ₃ C O O O NH NH

CI OH N N N N N N N N N N N N N N N N N N	CI OH N OH N CH ₃
H ₃ C O H OH N O	CI OH N CH ₃
H ₃ C O O CH ₃	CI OH NH
CI OH N CH ₃	H ₃ C O H OH N CH ₃ and

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1 2 12 (original): The method according to claim 1, wherein said aspartyl protease

inhibitor is a member selected from the group consisting of:

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- 1 13 (previously presented): The method in accordance with claim 1, wherein said
- 2 aspartyl protease inhibitor is a member selected from the group consisting of
 - CEL5-A having the following structure:

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CEL5G having the following structure:

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EA 1 having the following structure:

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1 14 (original): The method in accordance with claim 1, wherein said composition 2 is a body fluid.

1 15 (previously presented): The method in accordance with claim 14, wherein 2 said body fluid is cerebral spinal fluid.

16 (original): The method in accordance with claim 1, whereby formation of amyloidogenic $A\beta$ peptides ($A\beta$) is decreased compared to the amount formed in the absence of said aspartyl protease inhibitor.

17 (original): The method in accordance with claim 1, whereby formation of α-sAPP is increased compared to the amount formed in the absence of said aspartyl protease inhibitor.

18 (original): The method in accordance with claim 1, wherein the modulation is effected by modulating the activity of cathepsin D.

19 (previously presented): A method for modulating the processing of a tauprotein (τ -protein), said method comprising contacting a composition containing said τ -protein with an aspartyl protease inhibitor having the formula:

(I)

Appl. No. 10/774,262 Amdt. dated February 13, 2006 Reply to Office Action of August 12, 2005

5 wherein:

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R₁, R₂ and R₃ are members independently selected from the group consisting of alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl, substituted aryloxyalkyl, heteroaryl, substituted heteroaryl, heteroarylalkyl, substituted heteroarylalkyl, heterocycles, substituted heterocycles, heterocyclicalkyl and substituted heterocyclicalkyl; and

R₅ and R₆ are independently selected from the group consisting of hydrogen, halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl; or R₅ and R₆ and the carbons to which they are bound join to form an optionally substituted carbocyclic or heterocyclic fused ring system having a total of 9- or 10-ring atoms within said fused ring system.

20 (original): The method according to claim 19, wherein:

R₁ is a member selected from the group consisting of substituted alkylaryl, substituted aryl, substituted alkyl and substituted heterocyclic groups.

21 (original): The method according to claim 20, wherein:

 R_1 is a member selected from the group consisting of:

$$CH_2$$
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2

- 22 (original): The method according to claim 19, wherein:
- 2 R₂ is a member selected from the group consisting of substituted alkyl,
- 3 heterocyclic and substituted heterocyclic groups.

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- 1 23 (previously presented): The method according to claim 22, wherein R₂ is a
- 2 member selected from the group consisting of:

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$$\begin{array}{c} Cl \\ HC- \\ CH_{2}- \\ CI \\ CI \\ CI \\ CH_{2}- \\ CH_$$

1 24 (original): The method according to claim 19, wherein:

R₃ is a member selected from the group consisting of substituted alkyl and substituted aryl groups.

25 (original): The method according to claim 24, wherein R₃ is a member selected from the group consisting of:

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26 (original): The method according to claim 19, wherein R_5 and R_6 and the carbons to which they are bound form an optionally substituted napthalene ring.

27 (original): The method according to claim 19, wherein R_5 and R_6 are both hydrogen.

28 (original): The method in accordance with claim 19, wherein R_5 is hydrogen and R_6 is meta or para to R_5 and is a member selected from the group consisting of halogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, aryloxyalkyl and substituted aryloxyalkyl.

29 (original): The method according to claim 19, wherein said aspartyl protease inhibitor is a member selected from the group consisting of:

Cl OH N	OH N CI
H OH N N N N N N N N N N N N N N N N N N	CI OH N O O O O O O O O O O O O O O O O O
CI OH N ON N	
CH ₃ O O O O O O O O O O O O O O O O O O O	CI CI O O N N O N N N N N N N N N N N N N N

CI OH N OH	
CI OH N OH N O	OH N
CI OH OH N O O	OH N N N N N N N N N N N N N N N N N N N
CH ₃ OH N N N N N N N N N N N N N N N N N N	H ₃ C O O O O O O O O O O O O O O O O O O O

CI OH N ON N	CI OH N, CH ₃
H ₃ C O O O O O O O O O O O O O O O O O O O	CI OH N OH N CH ₃
H ₃ C O O O CH ₃	CI OH NH
CI OH N CH ₃	H ₃ C O H OH N CH ₃

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30 (original): The method according to claim 19, wherein said aspartyl protease

inhibitor is a member selected from the group consisting of:

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- 1 31 (previously presented): The method in accordance with claim 19, wherein
- 2 said aspartyl protease inhibitor is a member selected from the group consisting of
 - CEL5-A having the following structure:

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CEL5G having the following structure:

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EA 1 having the following structure:

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- 1 32 (original): The method in accordance with claim 19, wherein said
- 2 composition is a body fluid.
- 1 33 (previously presented): The method in accordance with claim 32, wherein 2 said body fluid is cerebral spinal fluid.
- 34 (original): The method in accordance with claim 19, whereby formation of τfragments is decreased compared to the amount formed in the absence of said aspartyl protease
 inhibitor.
 - 35 (original): The method in accordance with claim 19, wherein the modulation is effected by modulating the activity of cathepsin D.

36-50 (canceled)